

**“TO STUDY THE ROLE OF CENTESIMAL POTENCY IN REDUCING  
PAIN OF PATIENTS WITH OSTEOARTHRITIS OF KNEE JOINT ”**

**A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE  
REQUIREMENT**

**FOR THE AWARD OF THE DEGREE OF**

**DOCTOR OF MEDICINE (HOMOEOPATHY): M.D. (HOM.)**

**IN**

**ORGANON OF MEDICINE**

**AND**

**HOMOEOPATHIC PHILOSOPHY**

**By**

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**SUBMITTED TO**

**THE TAMILNADU Dr. M.G.R. MEDICAL UNIVERSITY, CHENNAI**

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*2019*

**ENDORSEMENT BY  
THE HEAD OF THE DEPARTMENT  
AND THE INSTITUTION**

This is to certify that the dissertation entitled “**TO STUDY THE ROLE OF CENTESIMAL POTENCY IN REDUCING PAIN OF PATIENTS WITH OSTEOARTHRITIS OF KNEE JOINT**” is a bonafide work carried out by

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This has not been submitted in full or part for the award of any degree or diploma from any University.

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## **CERTIFICATE BY THE GUIDE**

This is to certify that the dissertation entitled “ **TO STUDY THE ROLE OF CENTESIMAL POTENCY IN REDUCING PAIN OF PATIENTS WITH OSTEOARTHRITIS OF KNEE JOINT** ” is a bonafide work of **Dr. AMRUTHA MANOHARAN**. All her work has been carried out under my direct supervision and guidance. Her approach to the subject has been sincere, scientific and analytic. This work is recommended for the award of degree of **DOCTOR OF MEDICINE (HOMOEOPATHY)** in **ORGANON OF MEDICINE AND HOMOEOPATHIC PHILOSOPHY** of **THE TAMIL NADU DR. M.G.R MEDICAL UNIVERSITY, CHENNAI**.

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## **DECLARATION**

I, **Dr. AMRUTHA MANOHARAN** hereby declare that this dissertation entitled **“TO STUDY THE ROLE OF CENTESIMAL POTENCY IN REDUCING PAIN OF PATIENTS WITH OSTEOARTHRITIS OF KNEE JOINT ”** is a bonafide work carried out by me under the direct supervision and guidance of **Dr. MANOJ NARAYAN V. , M.D. (Hom.)**, Professor, Dept. of Organon of Medicine and Homoeopathic Philosophy, in partial fulfillment of the regulations for the award of degree of **Doctor of Medicine (Homoeopathy)** in **ORGANON OF MEDICINE AND HOMOEOPATHIC PHILOSOPHY** of The Tamil Nadu Dr. M.G.R Medical University, Chennai. This has not been submitted in full or part for the award of any degree or diploma from any University.

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**Dr. AMRUTHA MANOHARAN**

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# **ABSTRACT**

## **BACKGROUND**

The most common joint disorder, the most common cause of pain and disability in the older age group. Chronic knee pain, painful movements are the major symptoms. Homeopathic medicine can provide a palliative and more effective and long lasting relief to the patient. By the system of homoeopathy the old age people can get an affordable and effective way of treatment.

## **METHODS**

Random selection of 30 cases of patient with acute osteoarthritis of knee joint visiting OPD, IPD and Rural health centers of Sarada Krishna Homoeopathic Medical College and Hospital was taken. The case been analyzed totality erected and remedy prescribed based on totality. The pain of patient assessed with pain assessment chart. Assessment is repeated in short intervals and the changes were recorded. Statistical analysis is done by assessing the symptom score of before and after treatment using paired “t” test.

## **RESULTS**

- In 30 cases of Osteoarthritis of knee joint maximum prevalence was noticed in females 22 patients (73.33%). Maximum age group of patients was from 45-55 years of age, 14 patients (46.66%).
- The remedy which was given in maximum number of case was Bryonia alba in 16 cases (53%), followed by Rhus Toxicodendron in 11 cases 36%. maximum number of cases were housewives 18 (62%). Regarding outcome of the treatment based on improvement, 18 cases (60%) have marked

improvement, 8 cases (26%) have moderate improvement and 3 cases (10%) have mild improvement.

- According to BMI distribution 15 cases (50%) belong 25-29 kg/m<sup>2</sup>.

## **CONCLUSIONS**

The scale used was VAS scale and shows a significant improvement after treatment. From statistical analysis of the above result obtained it is found that Homoeopathic medicines used in centesimal potency was effective in the treatment of osteoarthritis of knee joint.

This study proves that centesimal potency is efficacious in reducing pain of patients with osteoarthritis of knee joint.

## **KEYWORDS**

Osteoarthritis of knee joint, Centesimal Potency.

## **ACKNOWLEDGEMENT**

I thank **ALMIGHTY GOD** who gave me strength, patience and grace strengthens me to complete this work.

I express my sincere thanks to my Beloved mother **ANITHA G. S** and my husband **RATHEESH P. G** for their valuable support.

I express my sincere thanks to my guide **Dr. MANOJ NARAYAN V, M.D. (Hom.)**, Professor, Department of Organon of medicine, Sarada Krishna Homoeopathic Medical College, Kulasekharam.

I convey my respectful regards to **Dr. C. K. MOHAN B.Sc., M.D. (Hom.)** Chairman, Sarada Krishna Homoeopathic Medical College, Kulasekharam for providing the opportunity to study in this Institution.

I am thankful to **Dr. N. V. SUGATHAN**, Principal and **Dr. WINSTON VARGHEESE**, PG coordinator, Sarada Krishna Homoeopathic Medical College, Kulasekharam. I express my heartfelt thanks to my respected teacher Professor and Head , Department of Organon of medicine **Dr. M. MURUGAN, M.D. (Hom.)**, for his timely support and sensible advices during my curriculum and dissertation work.

I would like to extend my thanks to **Dr. Bindhusaran, M.D (Hom.)**, of Sarada Krishna Homoeopathic Medical College, Kulasekharam for his timely support and encouragement. I extend my thanks to my friends **Dr. Ananth S., Dr. Kousalya G., Dr. Amritha Mohan, Dr. Suwamynathan, Dr. Divya Pusparaj, Dr. Vineetha Sreekumar and Dr. Aathira V. Nair** for their valuable help and support throughout my study. I also extend my sincere thanks to the patients who participated in the study

**Dr. Amrutha Manoharan**

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### LIST OF ABBREVIATIONS

SL.NO	ABBREVIATION	EXPANSION
1.	<	Aggravation
2.	>	Amelioration
3.	A/F=	Ailments from
4.	%	Percentage
5.	D	Dose
6.	SD	Sara Disket
7.	SG	Sara Globule
8.	SL	Saccharum Lactis
9.	HS	At night
10.	TDS	Thrice daily
11.	ST	Immediately
12.	F	Female
13.	M	Male
14	OPD	Outpatient department

15.	IPD	In patient department
16.	No.	Number
17.	Dr	Doctor
18	DM	Diabetes Mellitus
19.	QoL	Quality of life
20.	yrs	Years
21.	SI.NO.	Serial number
22.	ICMR	Indian Council of Medical Research
23.	MOS	Medical outcome study
24.	SF	Short Form Health Survey
25.	eg..	Example
26.	BT	Before treatment
27.	AT	After treatment

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# *Introduction*

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## **1.1 INTRODUCTION**

Homoeopathy is the most modern system of treatment in the world. The founder Master Samuel Hahnemann advocated the concept of similar remedy, minimum dose and rapid cure of the patient. Homoeopathy is also very useful in treating rheumatic disease.

Osteoarthritis is one of the most common degenerative joint disease, mainly affecting older age group. It comes under ICD -10 under degenerative joint diseases. In this study, my aim is to find out the efficacy of the centesimal potency in the management of osteoarthritis of the knee joint.

Osteoarthritis or degenerative joint disease is the most common joint disorder. The main feature is degeneration of the articular cartilage. Osteoarthritis is clinically presented as joint pain and crepitus in the elderly age group. It is radiologically characterized by decrease joint space, osteophytes and a variety of deformities that develop as the disease progress. Osteoarthritis mainly affects the weight bearing joints. As it is a degenerative joint disorder most of the old persons are suffering from this disease.

## **1.2. NEED FOR THE STUDY**

- In our modern society large number of patients are suffering from Osteoarthritis of knee joint, many pain relieving balms and pain killers are being used by the patient.
- Homeopathy has an excellent role in treating osteoarthritis of the knee joint and mainly reducing the pain and swelling.
- And one of the greatest advantages of homeopathic medicine is that it is having no side effects and is cost effective.

## **1.3. SCOPE OF THE STUDY**

- Centesimal potency can reduce the intensity, frequency of pain and swelling of osteoarthritis of the knee joint.
- Homoeopathic medicines are very effective in reducing the symptoms of osteoarthritis.

## **1.4. CLINICAL STUDY**

It is an observational clinical study conducted in the OPD, IPD and rural health Centers of Sarada Krishna Homeopathic Medical College. The study is based on the observational data's collected from the patients with osteoarthritis of the knee joint.

## **1.5. EFFECTIVENESS**

The expected outcome and good improvement from the use of the centesimal potency in the treatment of osteoarthritis of knee joint.



# *Aims And Objectives*

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## **2. AIMS AND OBJECTIVES**

- To know the role of the centesimal potency in reducing pain of osteoarthritis of the knee.
- To know the remedies indicated in the treatment of osteoarthritis of the knee joint.

# *Review of Literature*

---

### **3. REVIEW OF LITERATURE**

#### **3.1. OSTEOARTHRITIS**

Osteoarthritis or degenerative joint disease is the most common joint disorder. The fundamental manifestation is degeneration of the articular cartilage <sup>[26]</sup> characterized by a decreased joint space, osteophytes and a variety of deformities that develop as the disease progresses. The disease mainly affects the weight bearing joints. The relative risk is 1.9 for men and 3.2 for women.<sup>[1]</sup> Homoeopathy medicines are really valuable in reducing pain and symptoms of osteoarthritis of knee with significant improvement noted in VAS scale.<sup>[33]</sup> The term osteoarthritis was coined by John Spondon.<sup>[14]</sup>

#### **3.2.2. EPIDEMIOLOGY**

The Indian Journal of Orthopaedics conducted a study, which showed the overall prevalence of knee OA was found to be 28.7%. According to WHO, OA is the second commonest musculoskeletal problem (30%) in the world population.<sup>[45]</sup>

#### **3.2.3. INCIDENCE**

The incidence of osteoarthritis of the knee joint is found to be 28.7% and was highest in South India.<sup>[40]</sup>

#### **3.2.4. RISK FACTORS <sup>[47]</sup>**

**Endogenous** – age, sex, heredity, ethnic origin and post-menopausal changes.

**Exogenous** – macrotrauma, repetitive microtrauma, overweight, resistive joint surgery and lifestyle factors (alcohol, tobacco).

### **3.2.5. PATHOLOGICAL CHANGES** <sup>[32]</sup>

- Osteoarthritis of knee mostly affects the synovium of knee joints.
- The initial structural changes in osteoarthritis include enlargement, proliferation and disorganization of the chondrocytes in the superficial part of the articular cartilage.
- By fibrillation and cracking of the matrix the superficial layer of the cartilage is degraded.
- The underlying cancellous bone becomes sclerotic and thickened.
- Subchondral bone into the joint forming loose bodies articular joint mice.
- Osteophytes develop at the margins of the articular surface.
- Basic calcium phosphate and calcium pyrophosphate dehydrate crystals are present microscopically in most joints with end stage OA.<sup>[15]</sup>

### **3.2.6. SYMPTOMS AND SIGNS OF OSTEOARTHRITIS** <sup>[49]</sup>

- Pain may be severe or moderate in knee while resting, day or night.
- The patient has bonny crepitus from the affected compartment.<sup>[2]</sup>
- Crepitus or crackling during movement of the joint.
- Warmth over the joint.
- Limited range of movement.

### **3.2.7. DIAGNOSIS OF OA** <sup>[24]</sup>

#### **1. Physical examination:**

- Swelling
- Tenderness
- Limitation of movements

## **2. Investigation and lab tests:**

- X Ray of knee joint.
- Blood tests: To rule out any other causes of joint pain such as Rheumatoid Arthritis.
- ARTHROSCOPY – In this procedure, a tiny camera is used to visualize the interior of the joint and abnormality inside the joint is noted.<sup>[23]</sup>
- Joint fluid analysis – examining and testing the fluid from the joint can determine if there is any inflammation and if pain is caused by gout or infection.<sup>[20]</sup>

### **3.2.8. DIFFERENTIAL DIAGNOSIS OF OSTEOARTHRITIS OF KNEE JOINT<sup>[11]</sup>**

#### **1. RECURRENT DISLOCATION OF THE PATELLA**

Many reasons are for the dislocation of patella. Of these, anatomical abnormalities such as genu valgum and poor development of the ridge on the lateral femoral condyle should be cited first. Of the other causes, weakness of the vastus medialis and lax ligaments may lead to recurrent dislocation of the patella.

#### **2. ACUTE PYOGENIC ARTHRITIS**

The knees become swollen and show all signs of inflammation. The joint is very much tender.

### 3. TUBERCULOSIS OF THE KNEE

This is a part of generalized affection and infection and is mainly blood borne and settles in synovium or in the metaphysis or epiphysis of the femur or the tibia. Limb and aching are the early symptoms. Soon there will be a swelling of the joint with a slight flexion deformity.

### 4. CYSTS ABOUT THE KNEE

#### ANTERIORLY

(i) Prepatellar bursitis (housemaid's knee) results from friction between the half of patella and upper half of the ligamentum patella.

(ii) Infrapatellar bursitis (clergyman's knee) results from repeated kneeling and the bursa lies in the lower half of ligamentum patella.

#### MEDIALY

(i) *Bursa anseria* is between the tendons of the sartorius, gracilis and semitendinous superficially and the medial ligament deep to it.

(ii) *Cysts of the medial meniscus*

Is a rare than its lateral counterpart and the most important finding is that it disappears on flexion of the joint and reappears on extension till the knee joint is fully extended.

#### LATERALLY

(i) *The cyst of the lateral meniscus* - is more common than that of the medial meniscus. The cyst is quite tense and its tendency towards disappearance on flexion is in the popliteal space and often bilateral. The age is over 40 years.

## 5. RHEUMATOID ARTHRITIS

Mainly women of age group 30 and 50 years are affected. The disease is gradual in onset affecting small joints of the hand and foot. Pain is the main symptom, followed by stiffness, swelling and deformity. X-ray shows diffuse rarefaction of the neighbouring bones.

## 6. OSTEOCHONDRITIS DISSECANS <sup>[17]</sup>

Osteochondritis dissecans is a joint disorder which has a manifestation of cracks in the articular cartilage and the underlying subchondral bone. The symptoms are pain and swelling of the affected joint which catches and locks during movement.

## 7. CHONDROCALCINOSIS <sup>[17]</sup>

An arthritic disease in which calcium deposits are present in the peripheral joints. It resembles gout and often occurs in patients over 50 years of age who have osteoarthritis or diabetes mellitus. It most commonly invades the knee joint.

### **3.2.9. EXAMINATION OF KNEE JOINT <sup>[6]</sup>**

**INSPECTION** - Observe the gait when the patient enters the room.

The knee should be extended at heel strike and flexed at all other phases of the swing and stance. Look for loss of the normal hollows around the patella, a sign of swelling in the knee joint and suprapatellar pouch; note any other swelling in or around the knee.

**PALPATION** - Ask the patient to sit on the edge of the examining table with the knees in flexion.

In this position, bony landmarks are more visible, and the muscles, tendons, and ligaments are more relaxed, making them easier to palpate.



### **3.2.9. PREVENTION OF OSTEOARTHRITIS <sup>[51]</sup>**

#### **No. 1: Control Weight**

The most important thing to prevent osteoarthritis is weight reduction, which can be done by regular exercise and reducing the intake of diet.

#### **No. 2: Exercise**

If the muscles that run along the front of the thigh are weak, research shows you have an increased risk of painful knee osteoarthritis.

#### **No. 3: Avoid Injuries or Get Them Treated**

Injury to the knee joint is the major predisposing cause of developing osteoarthritis.

#### **No. 4: Eat Right**

No specific diet has been shown to prevent osteoarthritis. Certain **nutrients** have been associated with a reduced risk of the disease or its severity. They include:

**Omega-3 fatty acids.** These **healthy fats** reduce joint **inflammation**, while unhealthy fats can increase it. Good sources of omega-3 fatty acids include **fish oil** and certain plant/nut oils, including walnut, canola, soybean, **flaxseed**/linseed, and olive.

**Vitamin D.** A handful of studies have shown that **vitamin D** supplements decreased **knee pain** in people with osteoarthritis.

### **3.2.10. OSTEOARTHRITIS OF THE KNEE JOINT – HOMOEOPATHIC ASPECT<sup>[19]</sup>**

According to homoeopathic principles and homoeopathic classification of disease, Osteoarthritis comes under chronic disease and Master Hahnemann mentioned about chronic disease clearly in aphorism 72.

“They are disease of such a character that, with small often imperceptible beginnings, dynamically derange the living organism, each in its own peculiar manner and cause it gradually to deviate from the healthy condition, in such a way that the automatic life energy called vital force, whose office is to preserve the health, only opposes to them at the commencement and during their progress imperfect, unsuitable, useless resistance, but is unable of itself to extinguish them, but must helplessly suffer (them to spread and ) itself to be ever more and more abnormally deranged, until at length the organism is destroyed; these are termed as chronic disease. They are caused by infection with a chronic miasm.”

### **3.2.11. CONCEPT OF CENTESIMAL POTENCY**

#### **CENTESIMAL SCALE<sup>[16]</sup>**

This scale was introduced by Master Hahnemann in aphorism 270 of 5<sup>th</sup> Edition of Organon of medicine. Centesimal scale was discovered by Master Samuel Hahnemann. The ratio is 1:99 and drug strength is 1/99.

#### **DEFINITION**

The principle of centesimal potency is that the first potency must contain the one-hundredth part of the original drug and each succeeding potency, one hundredth part of the preceding one. This scale is applicable to the process of potentization by

the old method as established by master Hahnemann. This scale is used for making higher potencies.<sup>[4]</sup>

## DESIGNATION

The letter C or CH indicates the centesimal potency. Roman numerals are used to designate the higher strength.

1M = 1000

10M = 10,000

50M = 50,000

The potency of medicines prepared according to centesimal scale may also be represented by suffixing only the numerical and omitting the alphabet.

## DRUG STRENGTH<sup>[36]</sup>

Potency 1C- this is prepared by mixing 1 part of the original drug with 99 parts of the vehicle. On potentization, it gives 100 parts of 1C potency of the drug. Hence, 1 part of the original drug present in 100 parts of 1C potency. Hence the drug strength of 1C potency is  $1/100$  or  $10^{-2}$ .

### **3.2.12. MIASMATIC ANALYSIS OF SYMPTOMS OF OSTEOARTHRITIS OF KNEE JOINT<sup>[3]</sup>**

#### **Psora**

SENSATIONS - Numbness with tingling.

MODALITIES - Aggravation during winter season requires warmth both externally and internally, aggravation during winter season and requires warmth both externally and internally.

CHARACTER - Rheumatism of functional and inflammatory type of rheumatism.

### **Sycosis**

SENSATIONS - Pain is stitching, pulsating, shooting, wandering and tearing.

MODALITIES - Aggravation during storm, damp weather, on beginning to move and amelioration by motion, rubbing and pressure.

CHARACTER - Stiffness, soreness, lameness and easy spraining.

### **Syphilis**

SENSATIONS - Burning, bursting and tearing type of pain.

MODALITIES - Aggravation at night, sunrise, movement and warmth.

CHARACTER - Joints weak and fall easily.

## **3.2.13. STUDIES AND RESEARCH RELATED TO OSTEOARTHRITIS OF KNEE JOINT AND HOMOEOPATHY**

### **1. HOMOEOPATHIC MEDICINES FOR THE TREATMENT OF OSTEOARTHRITIS.<sup>[5]</sup>**

Many numbers of homoeopathic remedies are useful in treating osteoarthritis of the knee, according to symptom similarity, which proves valuable in the reduction of pain and corresponding symptoms.

### **2. REMEDY PROFILE USED IN OSTEOARTHRITIS.<sup>[42]</sup>**

In this study, constitutional medicine was prescribed, the medicines used were Calcarea carbonica, Pulsatilla, Rhus Toxicodendron, Sulphur and Bryonia Alba.

### 3. CONTROLLED TRIAL OF HOMOEOPATHIC TREATMENT OF OSTEOARTHRITIS. <sup>[34]</sup>

A double blind placebo controlled cross over study to compare Rhus Toxicodendron 6X with Fenoprofen in osteoarthritis of the knee and hip. And in this study, Rhus Toxicodendron 6X was proved effective in reducing the symptoms and pain of osteoarthritis.

### 4. A STUDY TO EVALUATE THE EFFICACY OF HOMOEOPATHY IN THE MANAGEMENT OF PRIMARY OSTEOARTHROSIS OF KNEE JOINT. <sup>[26]</sup>

A clinical study was done on 50 patients on degenerative arthropathy for primary osteoarthritis of the knee during the year 2010 to 2011. The sample size was 44.

The improvement criteria were assessed based on a Visual Analogue Scale and WOMAC scale. Based on the study, drugs were categorized according to different grades. GRADE 1 - Sepia, Calcarea carbonica, Pulsatilla Nigricans, Lycopodium and Thuja. GRADE 2 - Rhus Toxicodendron, Bryonia Alba, Colocynth, Lachesis and Pulsatilla. GRADE 3 - Calcarea Fluorica, Bryonia Alba and Rhus Toxicodendron.

### 5. EVALUATION OF HOMOEOPATHIC THERAPY IN OSTEOARTHRITIS. <sup>[10]</sup>

A study conducted by CCRH. The study was undertaken to see the effect of homoeopathic medicines and their reliable indications, their most useful potencies, frequency of administration. The study was conducted at the same time in clinical research unit Kottayam. The disease found to be most prevalent from the age ranged from 40 to 60 years of age. The drugs found to be effective are

Arsenicum album, Lycopodium, Medorrhinum, Natrum muriaticum, Pulsatilla nigricans and Rhus Toxicodendron.

#### 6. HOMOEOPATHY REMEDIES FOR THE TREATMENT OF OSTEOARTHRITIS - A SYSTEMATIC REVIEW.

The authors review the clinical evidence for and against the effectiveness of homoeopathic medicines in the treatment of patients with osteoarthritis. The authors concluded that small number of randomized controlled trials conducted to date, although favouring homoeopathic treatment, do not allow a firm conclusion as to the effectiveness of homoeopathic remedies in the treatment of patients with osteoarthritis.<sup>[10]</sup>

#### 7. EFFECT OF HOMOEOPATHIC TREATMENT ON ACTIVITY OF DAILY LIVING (ADL) IN KNEE OSTEOARTHRITIS: A PROSPECTIVE OBSERVATIONAL STUDY.

In a clinical study conducted in patients with osteoarthritis of the knee joint, with homoeopathic medicines and placebo, the overall results show that homoeopathic medicine has great advantage over treatment of osteoarthritis.<sup>[30]</sup>

#### 8. CLINICAL TRIALS OF HOMOEOPATHY IN OSTEOARTHRITIS: A SYSTEMATIC REVIEW<sup>[28,13,14,25]</sup>

A total of eight controlled clinical trials involving 1444 patients was included in the analysis. None of the studies used individualized homoeopathy, rather tried 'complex homoeopathy' and 'combination formula'. The studies were conducted from 1980 to 2013.<sup>[29][27][28]</sup> Positive and favorable results were obtained from homoeopathy.<sup>[33] [41]</sup>

## 9. EVIDENCE FOR THE EFFICACY OF COMPLEMENTARY AND ALTERNATIVE MEDICINES IN THE MANAGEMENT OF OSTEOARTHRITIS: A SYSTEMATIC REVIEW.<sup>[21]</sup>

In a clinical study RCT conducted on the treatment of OA were tested in three RCTs with a median Jadad score of 3, the effectiveness of Rhus Toxicodendron 12X, Causticum 12X and Lac vaccinum 12X, in relieving pain of osteoarthritis of the knee joint was compared with Paracetamol 2.6 mg/ day, the pain reduction by both methods was found equal and only minimum adverse effect were reported among patients taking homoeopathic medicines.<sup>[21]</sup>

## 10. EFFICACY OF HOMOEOPATHY IN THE TREATMENT OF OSTEOARTHRITIS.

In this study conducted by Dr. Poornima. G, the study states that homoeopathy has a palliative action in curing knee joint pain, and in the cases the main medicines used was Rhus Toxicodendron and Pulsatilla. The medicines were mainly used in 200 potency. Along with that ancillary measures were also used.<sup>[48]</sup>

## 11. COMMON MEDICINES FOR OSTEOARTHRITIS<sup>[38]</sup>

Rhus Toxicodendron, Bryonia Alba, Ruta, Causticum, Kalium carbonicum, Calcarea carb and Sulphur.

## **HOMOEOPATHIC MEDICINES FOR OSTEOARTHRITIS<sup>[22]</sup>**

There are many medicines for osteoarthritis in homoeopathy and the main medicines are mentioned below.

## **BRYONIA ALBA**

Pain with inflammation, which is aggravated by movement and relieved by moderate pressure and rest. There is inflammation of joints which are hot and swollen. Stiff knees and painful, joints red, swollen, hot, with stitches and tearing, with movement aggravates. Painful spot on pressure.<sup>[7]</sup> Worse, warmth, any motion, morning, eating, hot weather, exertion, touch. Pressure and rest relieve the symptoms. Pain in serous membranes and joints.

## **RHUS TOXICODENDRON**

There is restlessness and the pains are worse on first motion, better by continued motion. The joints are hot, painful and swollen. Tearing pains in tendons, ligaments and fascia. Limbs stiff paralyzed. The cold fresh air is not tolerated; it makes the skin painful.<sup>[7]</sup> It acts on cellular ligaments and fibrous joints.<sup>[8]</sup> Tenderness about the knee-joint. Complaints increased during sleep, cold, wet rainy weather and after rain; at night, during rest, and relieved by warm, dry weather, motion; walking, change of position, rubbing, warm applications, from stretching out limbs.

## **KALI CARBONICUM**

The nature of pain is stitching, stabbing and burning character which is relieved temporarily by cold application and not by rest or motion. The patient shrieks on account of pain. Pain is tearing in nature in limbs with swelling. The complaint increased in cold weather from soup and coffee, better in warm weather. The pains are sudden and so sharp which make the patient cry.



## **ARNICA MONTANA**

Arthritis which is of a chronic nature with a feeling of bruised soreness can indicate a need for this remedy. Sprained and dislocated feeling. Soreness after over exertion. Rheumatism begins low down and works up. Rheumatism begins low down and works up. The complaint aggravated during least touch, motion, rest, wine and damp cold. And better, lying down. Recent and remote affections from injuries, especially contusions or blows.

## **RUTA GRAVEOLENS**

Arthritis with a feeling of great stiffness and lameness, worse from cold and damp, and worse from exertion often is relieved by this remedy. Tendons and the capsules of the joints may be affected. Arthritis may have developed after overuse, from repeated wear and tear.

## **APIS MELLIFICA**

This remedy is mostly used in acute conditions with redness, tenderness and swelling. Joints feel hot and have stinging pain. Warmth can aggravate the symptoms and cool applications bring relief. The complaint got aggravated from heat in any form touch, pressure, late in the afternoon, after sleeping, in closed and heated rooms and relived by open air, uncovering, and cold bathing.<sup>[28]</sup>

## **CALCAREA CARBONICA**

Arthritis in a person who is flabby or overweight, and easily tired by exertion. Swelling of knees in fatty constitution with sweats on the head and hands worse in cold and damp weather.<sup>[28]</sup> Aggravated from exertion, mental or physical, ascending,

cold in every form, water, washing, moist air, wet weather, during full moon, standing. Better, dry climate and weather; lying on painful side.

### **STICTA PULMONARIA**

The main action reduces fluid in the joints. Housemaid's knee. Shooting pain in knees. Joints and neighbouring muscles red, swollen, painful. Rheumatic pains precede catarrhal symptoms.<sup>[7]</sup> Worse with sudden changes of temperature. Mainly curative in inflammatory rheumatism of the knee joint. It is very sudden in its attacks and unless promptly relieved by strict will go on to the oxidative stage and become chronic in character. Peculiar symptom legs felt as if floating in the air, or felt light and airy as if not resting on the bed.<sup>[39]</sup>

### **ELATERIUM**

Pain in the knees, toe thumb and fingers worse cold and damp weather.<sup>[28]</sup>

### **FOMICA RUFA**<sup>[12]</sup>

Pains, stiff and contracted joints. Better by warmth, pressure and rubbing.<sup>[7]</sup> Muscles feel strained and torn from their attachment. Weakness of lower extremities. Rheumatism comes on with suddenness and restlessness. Sweat does not relieve. Relief after midnight and from rubbing.

## *Materials And Methods*

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## **4. MATERIALS AND METHODS**

It includes collection of data, methodology, assessment and interpretation of data.

### **4.1. COLLECTION OF DATA**

#### **4.1.1. SOURCE OF DATA**

A sample of 30 cases was selected among the patients with OSTEOARTHRITIS OF KNEE JOINT visiting the OPD, IPD and Rural Centres of SARADA KRISHNA HOMOEOPATHIC MEDICAL COLLEGE for homoeopathic treatment had randomly assigned in the study.

#### **4.1.2. SAMPLE SIZE**

Sample Size: Minimum 30 cases.

Sampling Technique: Random Sampling.

#### **4.1.3. METHOD OF COLLECTION OF DATA**

Patients were selected on the basis of clinical features, history, examining the patient. Data were obtained from the patients, bystanders and investigator's observations. Recording done in pre structured case record format of SARADA KRISHNA HOMOEOPATHIC MEDICAL COLLEGE. Cases were selected according to the inclusion criteria.

#### **4.1.4. INCLUSION CRITERIA**

- Patients of age group 45-65.
- Both sexes.
- Diagnostic criteria are mainly based on the clinical presentation and X-ray.
- Improvement criteria are based on the symptomatic relief.

#### **4.1.5. EXCLUSION CRITERIA**

- Patients with disability, bed- ridden patients are excluded.
- Osteoarthritis of knee associated with any chronic and systemic disease on active treatment.

#### **4.2. METHODOLOGY**

Random selection of 30 cases of patient with Osteoarthritis of Knee from the OPD, IPD and Rural Centres of SARADA KRISHNA HOMOEOPATHIC MEDICAL COLLEGE. The case details will be recorded in standardized pre structured case format of SARADA KRISHNA HOMOEOPATHIC MEDICAL COLLEGE. The case will be analyzed totality erected. The symptoms will be evaluated and the susceptibility of patient assessed with scoring chart. The case will be repertorised (if needed) and a remedy will be prescribed. Potency and repetition of doses will be done under the homoeopathic principles based on the susceptibility. Assessment is done every week and the changes recorded.

#### **4.3. ASSESSMENT**

Assessment was done based on general and symptomatic improvement of the patient. Assessment was done and the changes are recorded for OPD and Rural patients. For effective assessment and evaluation, disease intensity score were given for each case. Before and after treatment scores were analysed by using paired 't' test.

#### **4.4. INTERPRETATION OF DATA**

The data's were interpreted according to clinical features, potency, repetitions of dose, disease intensity score and improvement. The results are represented in tables

and figures. The paired 't' test was applied to study the level of significance of the investigation.

## *Observation And Results*

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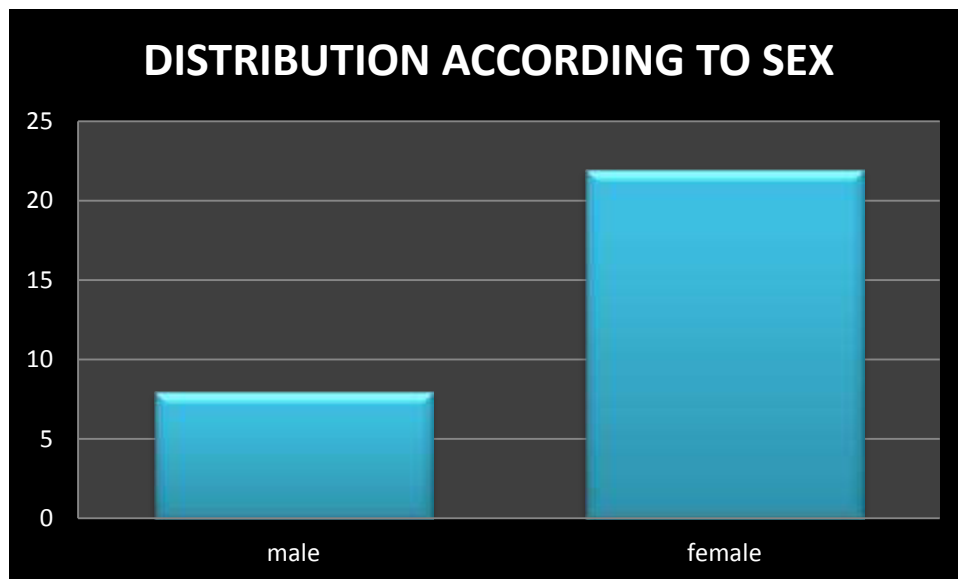
## 5. OBSERVATION AND RESULTS

**TABLE NO: 1**

### **5.1.1 DISTRIBUTION OF CASES ACCORDING TO SEX**

SEX	NO. OF CASES	PERCENTAGE
MALE	8	26.66 %
FEMALE	22	73.33%
TOTAL	30	100

**CHART NO: 1**



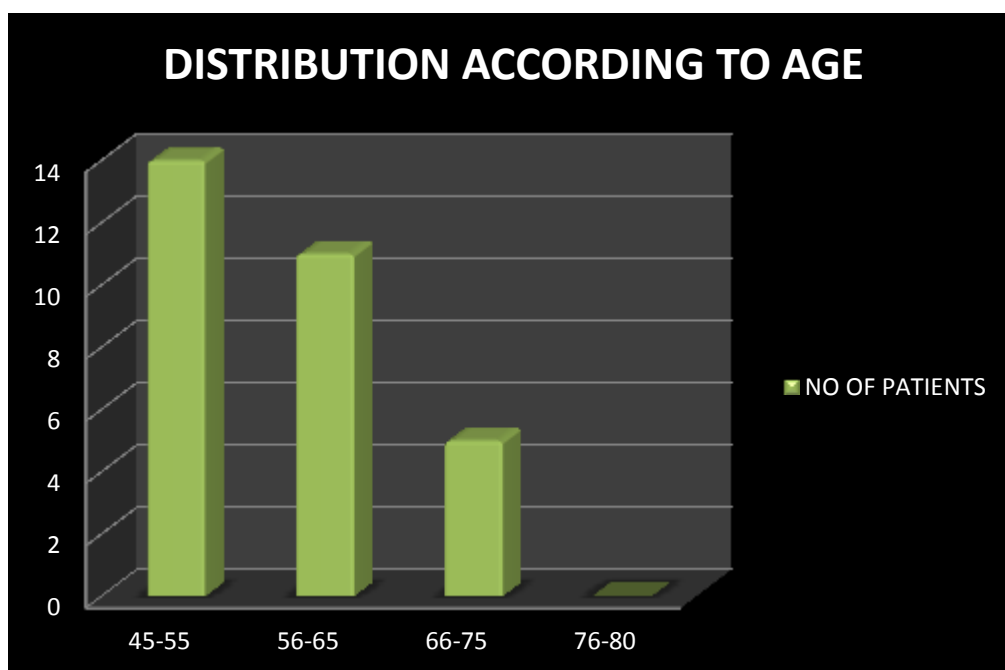


**TABLE NO: 2**

**5.1.2. DISTRIBUTION OF CASES ACCORDING TO AGE**

AGE	NO. OF CASES	PERCENTAGE
45 – 55 YEARS	14	46.66 %
56 - 65 YEARS	11	36.66 %
66- 75 YEARS	5	16.66%
76 – 80 YEARS	0	0 %

**CHART NO: 2**



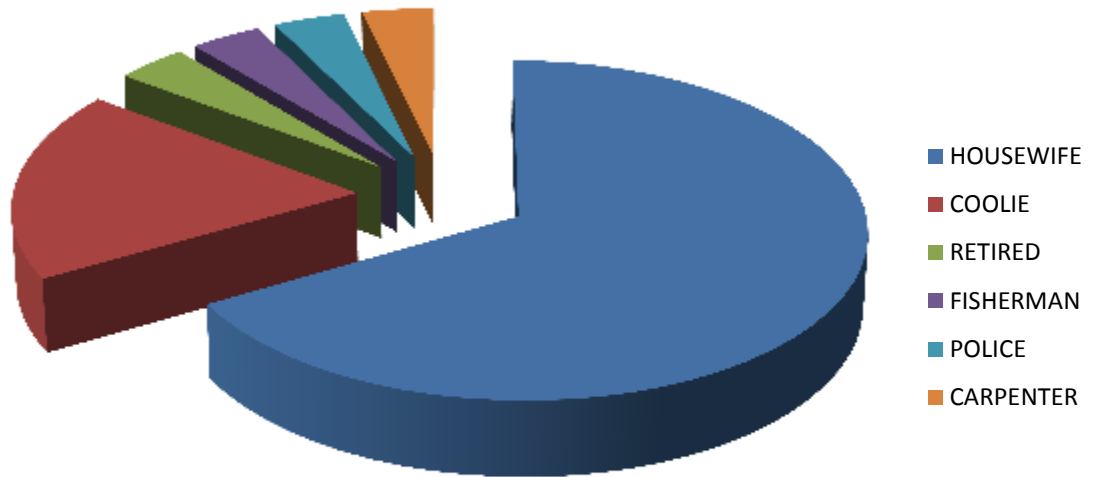
**TABLE NO: 3**

**5.1.3.DISTRIBUTION OF CASES ACCORDING TO OCCUPATION**

<b>OCCUPATION</b>	<b>NO.OF CASES</b>	<b>PERCENTAGE</b>
HOUSEWIFE	18	62%
COOLIE	5	16%
FISHERMAN	3	10%
RETIRED EMPLOYEES	1	3%
POLICE	1	3%
CARPENTER	1	3%
BUSINESS	1	3%

**CHART NO: 3**

**DISTRIBUTION ACCORDING TO OCCUPATION**

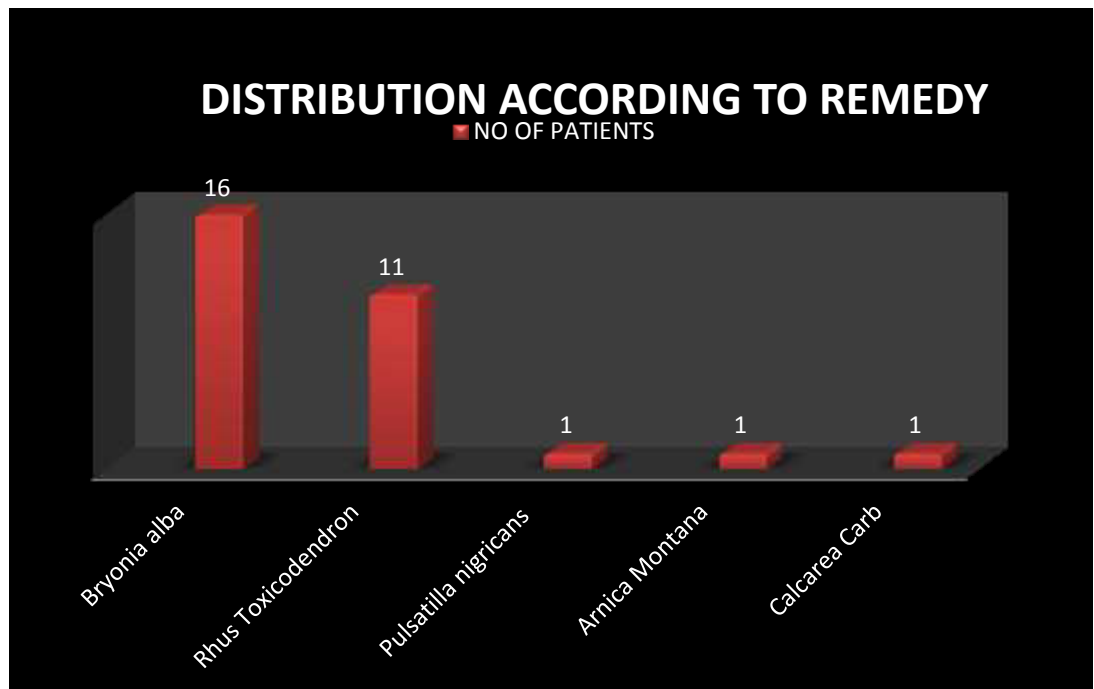


**TABLE NO.4**

**5.1.4. DISTRIBUTION OF CASES BASED ON REMEDY SELECTED**

REMEDY	NO.OF CASES	PERCENTAGE
BRYONIA ALBA	16	53%
RHUS TOXICODENDRON	11	36%
PULSATILLA	1	3.33%
ARNICA MONTANA	1	3.33%
CALCAREA CARB	1	3.33%

**CHART NO.4**

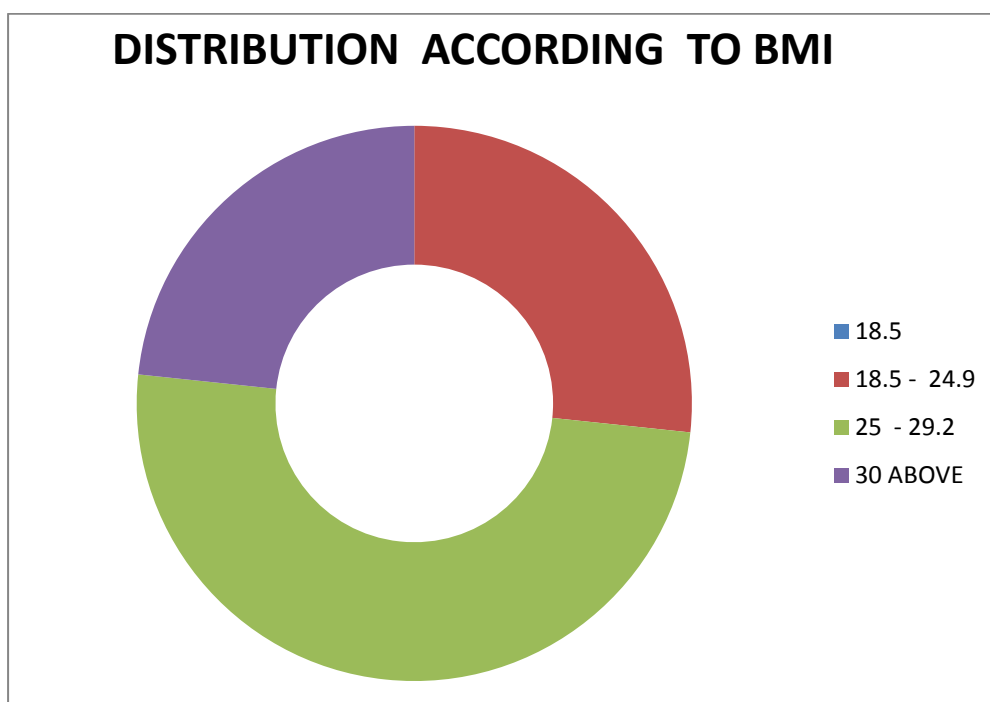


**TABLE NO. 5**

**5.15 DISTRIBUTION ACCORDING TO BMI**

BMI	NO OF CASES	PERCENTAGE
18.5 AND LESS	0	0%
18.5 – 24.9	8	26%
25 - 29.2	15	50%
30 AND ABOVE	7	24%

**CHART NO.5**

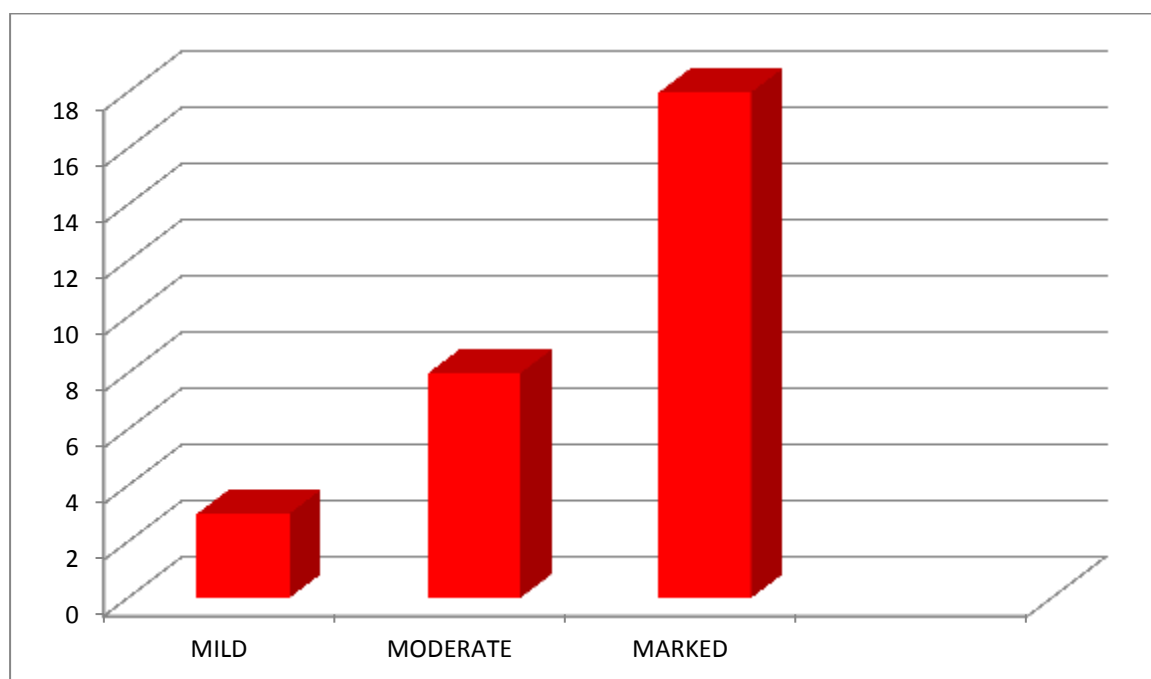


**TABLE.6**

**5.1.6. REPRESENTATION OF IMPROVEMENT**

IMPROVEMENT	NO.OF CASES	PERCENTAGE
MILD	3	10%
MODERATE	8	26%
MARKED	18	60%

**CHART.6**

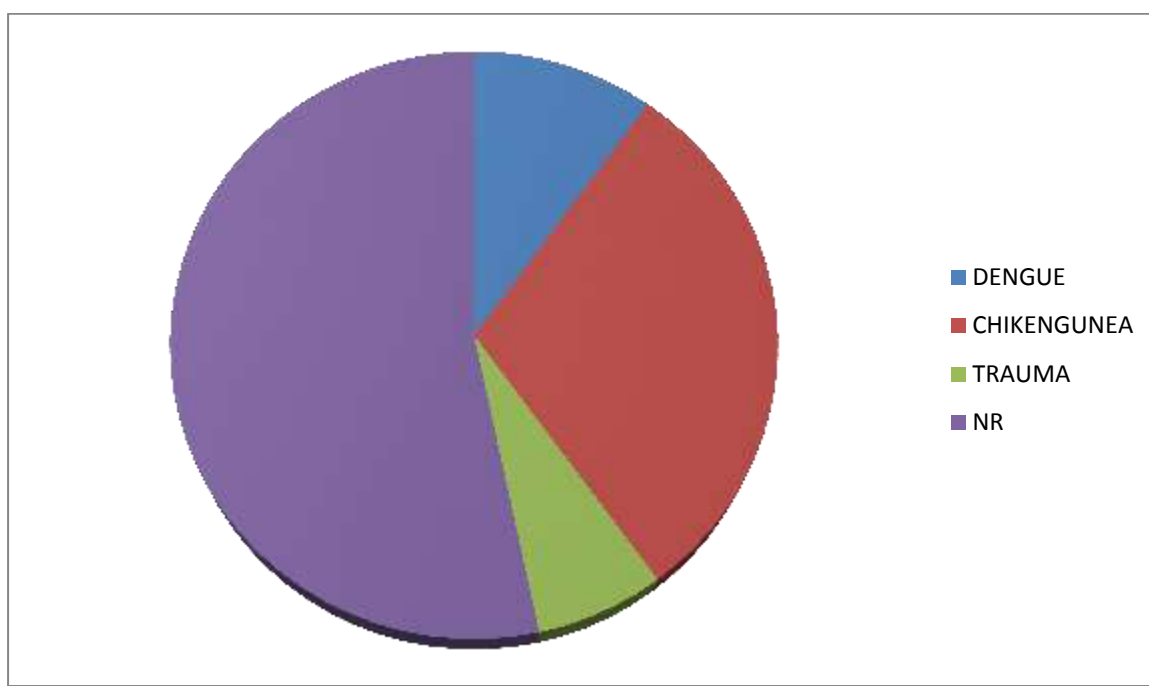


**TABLE 7**

**5.1.7 CASE OF PAST ILLNESS RELEVANT TO THE CASE**

H/O PAST ILLNESS	NO. OF CASES	PERCENTAGE
H/O DENGUE	3	10%
H/O TRAUMA	2	6.6%
H/O CHIKUNGUNYA	9	31%
NOTHING RELEVANT	16	53.3%

**CHART – 7**



## 5.2 SUMMARY OF FINDINGS

- Out of 30 patients studied, 22 patients (73.33%) were females and 8 patients (26.66%) were males.
- The age group distribution was 14 patients (46.66%) were from 45 – 55 years and 11 patients (36.66%) is from 56-65 years of age; 5 (16.66%) is from 66 – 75 Years of age; 0 case (0%) belongs to 76 – 80 years of age. Maximum number of cases, 14 patients (46.66%) are from 45- 55 years of age and 11 cases (36.66%) belongs to 56 – 65 years.
- When observed about the distribution of occupation of the study group, the result was the maximum number of cases were housewives 18 (62%), then 5 (16%) was coolie and followed by 3 (10%) were fisherman and 1 (3.33%) was police, 1 (3.33%) was doing business, 1 (3.33%) was carpenter and remaining 1 (3.33%) was retired employee.
- The medicine selected in most of the cases was Bryonia Alba in 16 cases (53%) followed by Rhus Toxicodendron in 11 cases 36%, and the rest of the cases by Pulsatilla, Arnica and Calcarea Carb with 1 case (3.33%).
- According to BMI distribution 15 cases (50%) belong 25-29.2; 8 cases (26%) belong to 18.5 – 24.9 and 7 cases (24%) belong to BMI 30 and above.
- Based on improvement, 18 cases (60%) have marked improvement, 8 cases (26%) have moderate improvement and 3 cases (10%) have mild improvement.
- Based on past illness, 16 cases (53.3%) have no past illness relevant to case, 9 cases (31%) have a history of Chikungunya, 3 cases (10%) have a history of dengue fever and 2 cases (6.6%) cases have a history of trauma.



### 5.3. STATISTICAL ANALYSIS

SL.NO	X	Y	d=X-Y	d- $\bar{d}$	(d- $\bar{d}$ ) <sup>2</sup>
1	4	2	2	- 0.7	0.49
2	4	2	2	- 0.7	0.49
3	4	2	2	- 0.7	0.49
4	4	2	2	- 0.7	0.49
5	4	2	2	- 0.7	0.49
6	4	1	3	0.3	0.09
7	4	0	4	1.3	1.69
8	4	1	3	0.3	0.09
9	4	1	3	0.3	0.09
10	3	1	2	- 0.7	0.49
11	4	3	1	-1.7	2.89
12	4	2	2	- 0.7	0.49
13	4	0	4	1.3	1.69
14	3	0	3	0.3	0.09
15	4	0	4	1.3	1.69
16	4	0	4	1.3	1.69
17	4	1	3	0.3	0.09

18	4	1	3	0.3	0.09
19	3	0	3	0.3	0.09
20	3	0	3	0.3	0.09
21	3	0	3	0.3	0.09
22	3	0	3	0.3	0.09
23	4	0	4	1.3	1.69
24	4	2	2	- 0.7	0.49
25	3	0	3	0.3	0.09
26	4	2	2	- 0.7	0.49
27	3	2	1	-1.7	2.89
28	4	1	3	0.3	0.09
29	4	2	2	- 0.7	0.49
30	3	0	3	0.3	0.09

**X**= Score before treatment

**Y**= Score after treatment

**d<sub>1</sub>**= Difference between before and after score

### Computerised Statistical Analysis (Microsoft Excel)

t-Test: Paired Two Sample for Means		
	<i>Variable 1</i>	<i>Variable 2</i>
Mean	3.7	1
Variance	0.217241	0.896552
Observations	30	30
Pearson Correlation	0.468807	
Hypothesized Mean Difference	0	
df	29	
t Stat	17.67565	
P(T<=t) one-tail	2.27E-17	
t Critical one-tail	1.699127	
P(T<=t) two-tail	4.54E-17	
t Critical two-tail	2.04523	

#### A. Question to be answered:

Is there any difference between the scores taken before and after the Homoeopathic treatment?

**B. Null Hypothesis:**

There is no difference between the scores taken before and after the Homoeopathic treatment.

**C. Standard error of the mean differences:**

The mean of the differences,  $\bar{d}_1 = \Sigma d_1/n = 81/30 = 2.7$

The estimate of population standard deviation is given by,

$$\Sigma(d_1 - \bar{d}_1)^2 = 20.3$$

$$\begin{aligned} SD &= \sqrt{\Sigma(d_1 - \bar{d}_1)^2 / n - 1} \\ &= \sqrt{20.3/29} \\ &= 0.83666002653 \end{aligned}$$

$$\text{Standard error (S.E)} = S.D/\sqrt{n} = 0.83666002653 / \sqrt{30} = 0.15275252316$$

$$\begin{aligned} \text{Critical ratio, } t &= \frac{\bar{d}}{S.D/\sqrt{n}} \\ &= 17.676 \end{aligned}$$

**D. Comparison with tabled value**

The critical ratio  $t$  follows a distribution with  $n-1$  degrees of freedom, the tabled value at 5% significance level is 2.045 for 29 degrees of freedom. Since the calculated value 17.676 is greater than the tabled value at 5% significance level. Thus the null hypothesis is rejected.

## **E. Inference**

This study shows significant reduction in the pain of patients with osteoarthritis of knee joint. Therefore this study shows that Homoeopathic medicines in centesimal potency were effective in reducing the pain of patients with osteoarthritis of knee joint.

## *Discussion*

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## 6. DISCUSSION

- The most common degenerative joint disorder affecting older age, osteoarthritis. This study was conducted on the patients who attended IPD, OPD and rural health centres of Sarada Krishna Homoeopathic Medical college. Both sexes were taken for the study.
- A total of 30 cases were selected for the study, which were followed during a minimum duration of 3 - 6 months.
- The assessment of improvement criteria was based on VAS scale. For statistical analysis 'T' test was applied. Out of 30 patients studied, 22 patients were females.
- Most of the age group of persons was from 45 – 55 years, about 14 cases. The occupation of most patients was analyzed and majority of them were housewives, 18 cases about (62%), 5 (16%) was coolie followed by 3 (10%) were fisherman and 1 (3.33%) was police, 1 (3.33%) was doing business carpenter, 1 (3.33%) was retired employee.
- In this study the remedy used in most cases was Bryonia Alba in 16 cases with a percentage of (53%), followed by Rhus Toxicodendron in 11 cases 36%, and the rest of the case by Pulsatilla, Arnica and Calcarea Carb with 1 case (3.33%).
- Based on the weight of the patient there was a significant number of patients who are obese who developed osteoarthritis. According to BMI distribution 15 cases (50%) belong 25-29.2 kg/m<sup>2</sup>, 8 cases (26%) belong to 18.5 – 24.9 kg/m<sup>2</sup> and 7 cases (24%) belong BMI 30 kg/m<sup>2</sup> and above.
- Assessment based on the improvement criteria and based on improvement, 18 cases (60%) have marked improvement, 8 cases (26%) have moderate improvement and 3 cases (10%) have mild improvement.

*Conclusion*

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## 7. CONCLUSION

- Females are affected more. In the study 73% were females.
- The patients with age group 45-55 years were affected more.
- The housewives are affected more due to their heavy work.
- Patients with BMI in the range of 25 – 29.2 kg/m<sup>2</sup> are affected more.
- In the study, 60% cases showed marked improvement of complaint.
- Past history of dengue and chikungunya increases the risk of osteoarthritis of the knee joint.
- Homoeopathic medicines given in centesimal potency have a great role in reducing pain of patients suffering with osteoarthritis of the knee joint.
- The medicines that were commonly used in the study are Rhus Toxicodendron and Bryonia Alba.

*Summary*

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## **8. SUMMARY**

The study was conducted in 30 cases that were selected based on the inclusion and exclusion criteria. The cases were followed regularly and at the end of study conclusion was arrived.

Maximum number of cases were females, being housewives. From the study it was evident that the person's with obesity has increased risk of developing osteoarthritis of the knee joint.

The most common remedy uses were Bryonia Alba followed by Rhus Toxicodendron. The result of the study highlights of efficacy of centesimal potency in reducing pain of patients with osteoarthritis of the knee joint.

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# *Appendices*

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## **APPENDIX I**

### **GLOSSARY**

1. Aggravation - A situation in which the patient feels worse from or symptom increased by a remedy
2. Amelioration - An improvement of the patient or decrease in the symptoms
3. Degeneration - Deterioration of a tissue or an organ in which its function is diminished or its structure is impaired.
4. Dose - Refers to the force of impact of the remedy. The homoeopathic dose means that particular preparation of the remedy employed in particular amount or form of the preparation.
5. Miasm - The term miasm is derived from a greek word miasma, meaning pollute, stain or morbidic emanation which affects the individual directly. In homoeopathy it means dynamic influence upon the vital force of a morbidic agent inimical to life and deranges the vital force or life principles of a man and is present in the surrounding of all human beings.
6. Osteophyte - A bony outgrowth occurring usually adjacent to an area of articular cartilage.
7. Placebo - An inert substance or drug given to satisfy patients, or as the control in a reaserch study. From the latin word, I shall please.
8. Potency - The power, vitality or dynamic which a homoeopathic remedy possess, often represented as a number attached to the remedy name, either immediately before or after.
9. Potentization - The process of preparing a homoeopathic remedy by repeated dilution with succussions.

## APPENDIX II

*“Case records are our valuable asset”*

**SARADA KRISHNA**

**HOMOEOPATHIC MEDICAL COLLEGE & HOSPITAL**

*KULASEKHARAM, KANYAKUMARI DIST, TAMIL NADU- 629161*

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### CHRONIC CASE RECORD

O.P. No:

UNIT :

Date:

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Name:

Age: Sex: Religion: Nationality:

Name of father/Spouse/Guardian/Son/Daughter:

Marital status:

Occupation:

Family size:

Diet:

Address:

Phone No (Mobile):

### FINAL DIAGNOSIS:

Homoeopathic	
Disease	

<b>RESULT:</b>	Cured	Relieved	Referred	Otherwise	Expired
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**2. INITIAL PRESENTATION OF ILLNESS**

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PATIENT'S NARRATION (in the very expressions used by him/her)	PHYSICIAN'S INTEROGATION (details Regarding symptoms narrated	PHYSICIAN,S OBSERVATION

---

### **3. PRESENTING COMPLAINTS**

LOCATION	SENSATION	MODALITY	CONCOMITANTS

### **4. HISTORY OF PRESENTING ILLNESS:**

### **5. HISTORY OF PREVIOUS ILLNESS**

### **6. HISTORY OF FAMILY ILLNESS**

### **7. PERSONAL HISTORY**

#### **A. LIFE SITUATION**

Place of birth:  
Socio- economic status:  
Nutritional status:  
Dwelling:  
Religion:  
Educational status :  
Marital status:  
Family status:  
Father ; Mother: Siblings: Male: Children:

#### **B. HABITS & HOBBIES**

Food:  
Addictions:  
Sleep:  
Artistic:

#### **C. DOMESTIC RELATIONS**

With family members:  
With other relatives:  
With neighbours/friends/colleagues:

### **8. LIFE SPACE INVESTIGATION**

#### **9. MENSTRUAL HISTORY:**

#### **10. OBSTETICAL HISTORY:**

#### **11. GENERAL SYMPTOMS:**

##### **A. PHYSICALS**

## I. FUNCTIONAL

1. Appetite :
2. Thirst :
3. Sleep :

## II. ELIMINATIONS

1. Stool :
2. Urine :
3. Sweat :

## III . REACTIONS TO

1. Time :
2. Thermal :
3. Season :
4. Covering :
5. Bathing :
6. Desire :

## IV . CONSTITUTIONAL

## **B. MENTAL GENERAL**

### **12. PHYSICAL EXAMINATION**

#### A) GENERAL

- Conscious :
- General appearance:
- General built and nutrition:
- Anaemia:
- Jaundice:
- Clubbing:



- Cyanosis:
- Oedema :
- Lymphadenopathy:
- Pulse rate: Resp rate: B.P:
- Temp:

## **B.SYSTEMIC EXAMINATION**

1.Respiratory system:

2.Cardiovascular system:

3.Gastro Intestinal system:

4.Urogenital system:

5. Skin and glands :

6. Musculoskeletal system

7.Central Nervous system:

8 . Endocrine:

9.Eye and ENT:

10.Others:

## **C.REGIONALS**

## **13. LABORATORY FINDINGS**

## **14. DIAGNOSIS**

❖ Provisional Diagnosis :

❖ Differential Diagnosis:

❖ Final Diagnosis (Disease):

## **15 .DATA PROCESSING**

### **A . ANALYSIS OF CASE**

COMMON	UNCOMMON

### **B. EVALUATION OF SYMPTOMS/TOTALITY OF SYMPTOMS**

### **C. MIASMATIC ANALYSIS:**

PSORA	SYCOSIS	SYPHILIS

### **D. TOTALITY OF SYMPTOMS**

### **E. HOMOEOPATHIC DIAGNOSIS**

## **16 . SELECTION OF MEDICINE**

**A. Non Repertorial Approach**

**B. Repertorial Approach**

## **17. SELECTION OF POTENCY AND DOSE**

**A. Potency**

**B. Dose**

## **18. PRESCRIPTION**

## **19. GENERAL MANAGEMENT INCLUDING AUXILIARY MEASURES**

**A. General/Surgical/Accessory:**

**B. Restrictions (Diet, Regimen etc.):**

Disease	Medicinal

## 20. PROGRESS AND FOLLOW UP

Date	Symptom(s) Changes	INFERENCE	PRESCRIPTION

### APPENDX III

#### SCORING CHART

SYMPTOMS	DATE
PAIN	
SWELLING	
TENDERNESS	
MORNING STIFFNESS	
DEGREE OF JOINT MOBILITY	

NO - 0

MILD - 1

MODERATE - 2

SEVERE - 3

WORST - 4

### **VERBAL PAIN INTENSITY SCALE**

SYMPTOMS	DATE
NO PAIN	0
MILD PAIN	1
MODERATE	2
SEVERE PAIN	3
VERY SEVERE PAIN	4
WORST PAIN	5

#### **APPENDIX - IV**

SARADA KRISHNA HOMOEOPATHIC MEDICAL COLLEGE HOSPITAL

KULASEKHARAM, KANYAKUMARI DIST, TAMIL NADU – 629

**NAME OF THE PATIENT:** Mrs. P. Susheela

**AGE:** 45years

**SEX:** Female

**RELIGION:** Hindu

**OCCUPATION:** Coolie

**ADDRESS:** Colachel

**DATE OF CASE TAKING:** 14/7/2017

**OP.NO :**7245/17

#### **PRESENTING COMPLAINT**

<b>Location</b>	<b>Sensation</b>	<b>Modality</b>	<b>Accompaniments</b>
Lower extremity  Knee joint (both left and right)  since 1 year	Aching pain	< walking  < raising from seat  < cold season  < squatting position  < ascending and descending stairs	
Back  Lumbosacral region  since 8 months	Aching pain	< lifting weight  < rising from seat	

### **History of present illness**

The patient complaints of aching pain in both knee joint since one year, before that he was perfectly well. He did not have any complaints like this before. Both knee joint pain developed gradually. The pain was aching in nature and was felt on both left and right knee joint. The pain has no extension. The patient got the pain during many times in a day. The pain lasts for few minutes. The pain usually comes during walking, ascending and descending stairs, cold season and rising from seat. The patient was under allopathic medication for one year, with mild relief. The patient also complaint of aching pain in lumbosacral region since eight months before that the patient was perfectly well. The patient took allopathic medication and got temporary relief of her complaint.

### **History of previous illness**

Before 15 years - Thyroid compliant - Allopathic medicine

Before 4 years - Surgery - Hemorrhoids

Before 6 months - Chickenpox - Allopathy - relieved

### **Family history**

Nothing relevant

### **Personal history**

Place of birth : Melpuram

Religion : Hindu

Education : 4th standard

Economic Status : Middle class

Nutritional Status : Weak



Marital status : Married  
Family status : Nuclear  
Occupation : Housewife

**Habits and hobbies**

Food : Non vegetarian  
Additions : Tea or coffee  
Sleep : Disturbed due to pain, occasionally

**Domestic relations**

With family members : Good  
With other relatives : Good  
With neighbours/ Friends/Colleagues : Good

**Sexual relation**

Premarital : No  
Marital : Yes  
Extra marital : No

**Psychic features**

Reaction to : Company – desire  
Exertion – aggravation  
Other features : Emotion - Anxious about his health, easily weeping, worry  
about children, grief about financial stress

**Physical features**

Appearance

Stature : Tall  
Complexion : Wheatish  
Gait : Normal  
Clean/Unclean : Clean

#### Generals

Appetite : 3 times/ day  
Thirst : 1 ½ - 2 liters/ day  
Sleep : normal  
Stool : difficult to pass  
Urine : 4-5 times/ day  
Sweat : Generalized

#### Reaction to:

Desire warm food and drinks  
Desire fanning, spicy food  
Bathing : Cold water  
Covering : Aversion  
Fanning : Needed  
Thermal : Hot patient

### **MENSTURAL HISTORY**

FMP – 16 years

LMP – 1/9/2017

### **OBSTETRICAL HISTORY**

G<sub>3</sub> P<sub>3</sub> A<sub>0</sub>D<sub>0</sub> L<sub>3</sub>

### **Physical examination**

#### General

Jaundice	: Nil
Anemia	: Nil
Oedema	: Nil
Cyanosis	: Nil
Clubbing	: Nil
Lymphadenopathy	: Nil
Skin eruption	: Nil
Weight	: 67.1 kg
Height	: 177 cm
BMI	: 19.76 kg/m <sup>2</sup>
Pulse	: 68 beats / minute
B.P	: 110/70 mm of Hg
Respiratory rate	: 16 breaths / minute
Temperature	: 98.6° F

### **EXAMINATION**

#### Musculoskeletal system

	Appearance	Movement
GAIT	Normal	Normal
ARMS	Normal	Normal
LEGS	Normal	Painful
SPINE	Normal	Normal

## **LOCAL EXAMINATION**

### **Examination of right and left knee joint**

INSPECTION - Gait is normal, attitude normal, no swelling, no muscle wasting.

PALPATION - No local warmth, no tenderness, no fluid collection. On popliteal space, no anomaly detected.

MOVEMENT - Flexion and extension, adduction and abduction and rotation are possible but painful. No crepitation felt on both left and right knee joint.

## **PROVISIONAL DIAGNOSIS**

OSTEOARTHRITIS OF KNEE JOINT

## **DIFFERENTIAL DIAGNOSIS**

Rheumatoid arthritis

Rheumatic arthritis

## **ANALYSIS OF THE CASE**

Common symptoms	Uncommon symptoms
Desires warm water and food	Desire company, easily weeping,
Desires fanning	worry about her children
Aversion covering	Fear about her complaint,
Lower extremity	grief about financial crisis
Knee joint pain	desires spicy food
< walking	Knee joint pain
< cold season	< raising from seat
< ascending and descending stairs	< squatting position
Lumbosacral region	Lumbosacral region
< lifting weight	< rising from seat

## **EVALUATION OF CASE**

### **Mental generals**

Desire company, easily weeping, worry about her children

Fear about her complaint, grief about financial crisis

### **Physical generals**

Desire warm water and food, desire spicy food

Desire fanning

Aversion covering

### **Particular**

Knee joint pain

< walking

< cold season

< ascending and descending stairs

< raising from seat

< squatting position

Lumbosacral region

< lifting weight

< sitting

< rising from seat

< cold exposure

### **TOTALITY OF SYMPTOMS**

- Desires company, easily weeping, worry about her children
- Fear about her complaint, grief about financial crisis
- Desires warm water and food, desires spicy food
- Desire fanning
- Aversion covering
- Knee joint pain
- < walking
- < cold season
- < ascending and descending stairs
- < squatting position
- Lumbosacral region pain
- < lifting weight
- < sitting
- < rising from seat
- < cold exposure

### **MIASMATIC EXPRESSION**

<b>Psora</b>	<b>Sycosis</b>	<b>Syphilis</b>
Desire warm food Desire spicy food lifting weight, rising from seat	< walking < cold season	

**PROMINENT MIASM:** Psora

**REPERTORIAL TOTALITY**

STOMACH - DESIRE – highly seasoned food

EXTREMITIES - PAIN – knee walking after

EXTREMITIES - PAIN - knee cold when exposed to

BACK – PAIN - lumbar region wet weather in

BACK – PAIN - lumbar region rising from seat

**REPERTORIAL RESULT**

RhusTox : 7/4

Bryonia : 6/3

Fer.m: 3/2

Lach: 3/2

**MANAGEMENT AND TREATMENT**

General management

- Avoid overexertion and strenuous exercise
- Eat more calcium rich foods
- Advice to do physiotherapy

## **MEDICINAL**

### **R<sub>x</sub>**

1. RHUS TOXICODENDRON

200 / 1 dose in 10 ml aqua 10

gtt X 3 times

2. SD 1-0-1

3. SG 3-0-3

For 3 weeks

## **BASIS OF SELECTION**

### **MEDICINE: RHUS TOXICODENDRON**

Desire highly seasoned food

Knee pain walking after

Knee pain cold when exposed to

Lumbar region pain wet weather in

Lumbar region pain rising from seat

Rectum constipation

**POTENCY: 200**

**DOSE: Single dose**



### Follow ups

DATE	FOLLOW UP	MEDICINE PRESCRIBED
21/8 /2017	<p>Knee joint aching pain</p> <p>Persist but slightly better than before</p> <p>&lt; walking</p> <p>&lt; raising from seat.</p> <p>&lt; cold season</p> <p>&lt; squatting position</p> <p>&lt; ascending and descending stairs</p> <p>Lumbosacral region aching pain</p> <p>Persist but slightly better than before</p> <p>&lt; lifting weight</p> <p>&lt; rising from seat.</p> <p>B.P – 130/80 mm of Hg.</p> <p>All generals good</p>	<p>R<sub>x</sub></p> <ol style="list-style-type: none"> <li>1. RHUS TOXICODENDRON 200 / 3dose, 1 dose in 10 ml aqua 10 gtt X 2 hourly</li> <li>2. SD 1-0-1</li> <li>3. SG 3-0-3</li> </ol> <p>For 3 weeks</p>
11/9/2017	<p>Knee joint aching pain</p> <p>Persist but slightly better than before</p> <p>&lt; cold season</p> <p>&lt; squatting position</p>	<p>R<sub>x</sub></p> <ol style="list-style-type: none"> <li>1. RHUS TOXICODENDRON 200 / 3dose, 1 dose in 10 ml aqua 10 gtt X 2 hourly</li> </ol>

	<p>&lt; ascending and descending stairs</p> <p>Lumbosacral region aching pain</p> <p>Persist but slightly better than before</p> <p>&lt; lifting weight</p> <p>B.P – 120/80 mm of Hg.</p> <p>All generals good</p>	<p>2. SD 1-0-1</p> <p>3. SG 3-0-3</p> <p>For 3 weeks</p>
2/10/2017	<p>Knee joint aching pain</p> <p>Persist but slightly better than before</p> <p>&lt; cold season</p> <p>&lt; squatting position</p> <p>&lt; ascending and descending stairs</p> <p>Lumbosacral region aching pain</p> <p>Persist but slightly better than before</p> <p>&lt; lifting weight</p> <p>B.P – 130/80 mm of Hg.</p> <p>All generals good</p>	<p>R<sub>x</sub></p> <p>1. RHUS TOXICODENDRON</p> <p>200 / 3dose, 1 dose in 10 ml</p> <p>aqua 10 gtt X 2 hourly</p> <p>2. SD 1-0-1</p> <p>3. SG 3-0-3</p> <p>For 3 weeks</p>
30/10/2017	<p>Knee joint aching pain persist but better than before</p>	

	<p>&lt; cold season</p> <p>&lt; squatting position</p> <p>&lt; ascending and descending stairs</p> <p>Lumbosacral region aching pain</p> <p>persist but better than before</p> <p>&lt; lifting weight</p> <p>B.P – 130/70 mm of Hg.</p> <p>All generals good</p>	<p>R<sub>x</sub></p> <ol style="list-style-type: none"> <li>1. RHUS TOXICODENDRON</li> </ol> <p>200 / 3dose, 1 dose in 10 ml</p> <p>aqua 10 gtt X 2 hourly</p> <ol style="list-style-type: none"> <li>2. SD 1-0-1</li> <li>3. SG 3-0-3</li> </ol> <p>For 3 weeks</p>
13/11/2017	<p>Knee joint aching pain persist but much better than before</p> <p>&lt; cold season</p> <p>&lt; squatting position</p> <p>&lt; ascending and descending stairs</p> <p>Lumbosacral region aching pain</p> <p>persist but much better than before</p> <p>&lt; lifting weight</p> <p>B.P – 120/70 mm of Hg.</p> <p>All generals good</p>	<p>R<sub>x</sub></p> <ol style="list-style-type: none"> <li>1. RHUS TOXICODENDRON</li> </ol> <p>200 / 3dose, 1 dose in 10 ml</p> <p>aqua 10 gtt X 2 hourly</p> <ol style="list-style-type: none"> <li>2. SD 1-0-1</li> <li>3. SG 3-0-3</li> </ol> <p>For 3 weeks</p>

30/11/2017	<p>Knee joint aching pain persist but much better than before</p> <p>&lt; cold season</p> <p>&lt; squatting position</p> <p>&lt; ascending and descending stairs.</p> <p>Lumbosacral region aching pain persist but much better than before</p> <p>&lt; lifting weight</p> <p>B.P – 138/80 mm of Hg.</p> <p>All generals good</p>	<p>R<sub>x</sub></p> <ol style="list-style-type: none"> <li>1. RHUSTOXICODENDRON 200 / 3dose, 1 dose in 10 ml aqua 10 gtt X 2 hourly</li> <li>2. SD 1-0-1</li> <li>3. SG 3-0-3</li> </ol> <p>For 3 weeks</p>
15/1/2018	<p>Knee joint aching pain persist but much better than before</p> <p>&lt; prolonged walking.</p> <p>Lumbosacral region aching pain persist but much better than before</p> <p>&lt; prolonged standing</p> <p>B.P – 138/80 mm of Hg.</p> <p>All generals good</p>	<p>R<sub>x</sub></p> <ol style="list-style-type: none"> <li>1. RHUS TOXICODENDRON 200 / 3dose, 1 dose in 10 ml aqua 10 gtt X 2 hourly</li> <li>2. SD 1-0-1</li> <li>3. SG 3-0-3</li> </ol> <p>For 3 weeks</p>

### **SCORING CHART**

SYMPTOMS	21/8/17	11/9/17	2/10/17	30/7/17	13/11/17	30/11/17	15/1/18
PAIN	3	3	3	3	2	2	1
SWELLING	0	0	0	0	0	0	0
TENDERNESS	0	0	0	0	0	0	0
MORNING STIFFNESS	3	2	2	2	1	1	1
DEGREE OF JOINT MOBILITY	3	3	3	2	2	1	1

### **VERBAL PAIN INTENSITY SCALE**

SYMPTOMS	21/8/17	11/9/17	2/10/17	30/7/17	13/11/17	30/11/17	15/1/18
NO PAIN							
MILD PAIN						1	1
MODERATE				2	2		
SEVERE PAIN		3	3				
VERY SEVERE PAIN	4						
WORST PAIN							

**NAME OF THE PATIENT:** Mrs. Rama Prabha

**AGE:** 45 years

**SEX:** Female

**RELIGION:** Hindu

**OCCUPATION:** Housewife

**ADDRESS:** Padmanabapuram

**DATE OF CASE TAKING:** 23/9/17

**OP. NO.:** 7086/17

**PRESENTING COMPLAINT**

Location	Sensation	Modality	Accompanied
Lower extremity left knee joint since 3 years	Aching pain	< ascending steps < cold exposure < touch < flexing limb < rising from seat < rest > continued motion	

**HISTORY OF PRESENT ILLNESS**

The patient complaints of aching pain in the left knee joint since three years. The complaint developed gradually and she was perfectly well before the complaint and she does not have anything like that before. The pain in the left knee joint comes many times in a day. The pain has no extension, it was only felt in left knee joint. The

pain was aching in nature, which lasts for few minutes. The patient was under allopathic medication for three years and she got mild relief of her complaints.

### **HISTORY OF PREVIOUS ILLNESS**

Nothing relevant

### **FAMILY HISTORY**

History of hypertension – Father

History of diabetes mellitus - Mother

### **PERSONAL HISTORY**

Place of birth	: Tirunelveli
Religion	: Hindu
Education	: 10 <sup>th</sup> standard
Economic Status	: Middle Class
Nutritional Status	: Weak
Marital status	: Married
Family status	: Nuclear
Occupation	: Housewife

### **HABITS AND HOBBIES**

Food	: Non vegetarian
Additions	: Tea or coffee
Sleep	: Disturbed due to pain

### **DOMESTIC RELATIONS**

With family members	: Good
With other relatives	: Good



With neighbours/ Friends/Colleagues : Good

### **SEXUAL RELATION**

Premarital : No

Marital : Yes

Extra marital : No

### **PSYCHIC FEATURES**

Appearance : Easily angered

Co-operative

Reaction to : Company – desire

Exertion – aggravation

Other features : Emotion: Anxious about her health

### **PHYSICAL FEATURES**

Appearance

Stature : Tall

Complexion :Wheatish

Gait : Normal

Clean / Unclean : Clean

Generals

Appetite : 3 times / day

Thirst : 1 ½ - 2 liters / day

Sleep : good

Stool : 3-5 times /day

Urine : 4-5 times /day

Sweat : Generalized

Reaction to:

Desire cold food and drinks

Desire cold season, fanning

Bathing : Cold water

Covering : Aversion

Fanning : Needed

Thermal : Hot patient

### **PHYSICAL EXAMINATION**

General

Jaundice : Nil

Anemia : Nil

Oedema : Nil

Cyanosis : Nil

Clubbing : Nil

Lymphadenopathy : Nil

Skin eruption : Nil

Weight : 65 kg

Height : 147 cm

BMI : 30.09 kg/m<sup>2</sup>

Pulse : 68 beats / minute

B.P : 110/70 mm of Hg

Respiratory rate : 16 breaths / minute

Temperature : 98.6°F

## **SYSTEMIC EXAMINATION**

Musculoskeletal system

	Appearance	Movement
GAIT	Normal	Normal
ARMS	Normal	Normal
LEGS	Normal	Painful
SPINE	Normal	Normal

## **LOCAL EXAMINATION**

Examination of knee joint left

INSPECTION - Gait is normal, attitude normal, no swelling, no muscle wasting.

PALPATION – No local warmth, mild tenderness, no fluid collection. on popliteal space no anomaly detected.

MOVEMENT – Flexion and extension, adduction and abduction and rotation are possible but painful. Mild crepitation felt on left knee joint.

## **MENSTRUAL HISTORY**

LMP : 1/9/2017

FMP : 13 years of age

Cycle : 28 days

Duration : 5 days

Quantity : Normal

Consistency and clots : Normal consistency and no clots

Colour and odour : Bright red and no specific odour

Stains and acidity : No stains and acidity

## **OBSTETRICAL HISTORY**

P<sub>2</sub> A<sub>0</sub> L<sub>1</sub> At 30 years- Caesarean delivery – Female child – 2 ½ kg

At 31 years- Caesarean delivery – Male child – 2 ½ kg

## **PROVISIONAL DIAGNOSIS**

OSTEOARTHRITIS OF LEFT KNEE JOINT

## **DIFFERENTIAL DIAGNOSIS**

Rheumatoid arthritis

Rheumatic arthritis

## **ANALYSIS OF THE CASE**

Common symptom	Uncommon symptom
Left knee joint pain  < flexing knee  < walking  < rising from seat  < flexing the knee	Left knee joint pain  > continued motion  Company – desire  Anxious about her health  Desire cold food and drinks

## **EVALUATION OF CASE**

Company – desire

Anxious about her health

Desire cold food and drinks

Left knee joint pain

> continued motion

< flexing knee

< walking

< rising from seat

### **TOTALITY OF SYMPTOM**

Anxious about her health

Desire cold food and drinks

Left knee joint pain

> continued motion

< flexing knee

< walking

< rising from seat

### **MIASMATIC EXPRESSION**

<b>Psora</b>	<b>Sycosis</b>	<b>Syphilis</b>
Family history of diabetes mellitus Family history of hypertension Desire cold food and drink	> cold water application Desire cold food and drinks	< walking

**PROMINENT MIASM:** Psora

**REPERTORIAL TOTALITY**

MIND - ANXIETY – health about

EXTRIMITIES - PAIN - knee - left

EXTRIMITIES – PAIN - knee – walking on

EXTRIMITIES - PAIN – knee – rising from a seat

EXTRIMITIES – PAIN - knee - motion amelioration

**REPERTORIAL RESULT**

Rhustox ; 7/4

Lyco ; 5/3

Sulphur ; 5/3

Puls ; 5/2

Calc ; 3/2

**MANAGEMENT AND TREATMENT**

Plan of treatment

Medicinal management

General management

- Avoid overexertion and strenuous exercise
- Eat more calcium rich foods

- Advised to do physiotherapy

## **MEDICINAL**

### **R<sub>x</sub>**

1. RHUS TOXICODENDRON 200 / 1 Dose in

10 ml aqua / 10 gtt 2 hourly

2. SD ( 1 – 0 - 1 )

3. SG ( 3 - 0 – 3 )

For 1 week

## **BASIS OF SELECTION**

### **MEDICINE: RHUS TOXICODENDRON**

Anxious about her health

Desire cold food and drinks

Left knee joint pain

> continued motion

< flexing knee

< walking

< rising from seat

**POTENCY: 200**

**DOSE: Single dose**

## **FOLLOW UPS**

<b>DATE</b>	<b>FOLLOW UP</b>	<b>MEDICINE PRESCRIBED</b>
1/10/17	<p>Aching pain in left knee joint persists, but much better than before.</p> <p>&lt; flexing knee</p> <p>&lt; walking</p> <p>&lt; rising from seat</p> <p>All generals good</p> <p>BP – 130/86 mm of Hg</p>	<p>R<sub>x</sub></p> <p>4. RHUS TOXICODENDRON</p> <p>200 / 3 Dose, 1 dose in 10 ml</p> <p>aqua 10 gtt X 2 hourly</p> <p>5. SD 1-0-1</p> <p>6. SG 3-0-3</p> <p>For 3 weeks</p>
21/10/17	<p>Aching pain in left knee joint persists, but much better than before.</p> <p>&lt; flexing knee</p> <p>&lt; walking</p> <p>&lt; rising from seat</p> <p>All generals good</p> <p>BP – 120/86 mm of Hg</p>	<p>R<sub>x</sub></p> <p>1. RHUS TOXICODENDRON</p> <p>200 / 3 Dose, 1 dose in 10 ml</p> <p>aqua 10 gtt X 2 hourly</p> <p>2. SD 1-0-1</p> <p>3. SG 3-0-3</p> <p>For 3 weeks</p>
11/11/2017	<p>Aching pain in left knee joint persists, but much better than before.</p> <p>&lt; walking</p> <p>&lt; rising from seat</p> <p>All generals good</p>	<p>R<sub>x</sub></p> <p>1. RHUS TOXICODENDRON</p> <p>200 / 3 Dose, 1 dose in 10 ml</p> <p>aqua 10 gtt X 2 hourly</p> <p>2. SD 1-0-1</p> <p>3. SG 3-0-3</p>



	BP – 120/86 mm of Hg	For 3 weeks
4/12/2017	<p>Aching pain in left knee joint persists, but much better than before.</p> <p>&lt; flexing knee</p> <p>&lt; walking</p> <p>&lt; rising from seat</p> <p>All generals good</p> <p>BP – 130/80 mm of Hg</p>	<p>R<sub>x</sub></p> <ol style="list-style-type: none"> <li>1. RHUS TOXICODENDRON 200 / 3 Dose, 1 dose in 10 ml aqua 10 gtt X 2 hourly</li> <li>2. SD 1-0-1</li> <li>3. SG 3-0-3</li> </ol> <p>For 3 weeks</p>
25/12/2017	<p>Aching pain in left knee joint persists, but much better than before.</p> <p>&lt; flexing knee</p> <p>&lt; walking</p> <p>All generals good</p> <p>BP – 130/80 mm of Hg</p>	<p>R<sub>x</sub></p> <ol style="list-style-type: none"> <li>1. RHUS TOXICODENDRON 200 / 3 Dose, 1 dose in 10 ml aqua 10 gtt X 2 hourly</li> <li>2. SD 1-0-1</li> <li>3. SG 3-0-3</li> </ol> <p>For 3 weeks</p>

**SCORING CHART**

SYMPTOMS	1/10/2017	21/10/2017	1/11/2017	4/12/2017	25/12/2017
PAIN	3	3	2	2	2
SWELLING	0	0	0	0	0
TENDERNESS	3	3	2	2	2
MORNING STIFFNESS	3	3	2	2	2
DEGREE OF JOINT MOBILITY	3	3	2	2	2

**VERBAL PAIN INTENSITY SCALE**

SYMPTOMS	1/10/2017	21/10/2017	1/11/2017	4/12/2017	25/12/2017
NO PAIN					
MILD PAIN					
MODERATE				2	2
SEVERE PAIN		3	3		
VERY SEVERE PAIN	4				
WORST PAIN					

**APPENDIX V**  
**MASTER CHART**

SL NO.	PATIENT DETAILS	OCCUPATION	BMI in kg/m <sup>2</sup>	DURATION	PAST HISTORY WHICH IS RELAVANT TO THE CASE	REMEDY AND POTENCY	PAIN		REMARKS
							BT	AT	
1.	Mrs. F 45 yrs/F	Housewife	26.37	3 YEARS	NR	RHUS TOXICODENDRON 200	4	2	MODERATE IMPROVEMENT
2.	Mrs. H 51 yrs/F	Coolie	26.93	3 YEARS	NR	BRYONIA ALBA 200	4	2	MODERATE IMPROVEMENT
3.	Mrs. K 46 yrs/F	Housewife	27.5	4 YEARS	H/O DENGUE BEFORE 1 YEAR	RHUS TOXICODENDRON 200	4	2	MODERATE IMPROVEMENT

4.	Mrs. R 45 yrs/F	Housewife	30.09	3 YEARS	NR	RHUS TOXICODENDRON 200	4	2	MODERATE IMPROVEMENT
5.	Mr.T 70 yrs/M	Coolie	19.76	5 YEARS	NR	BRYONIA ALBA 200	4	2	MODERATE IMPROVEMENT
6.	Mrs.P.S 45yrs/F	Coolie	19.76	1 YEARS	NR	RHUS TOXICODENDRON 200	4	1	MARKED IMPROVEMENT
7.	Mrs. S.V 61 yrs/F	Housewife	19.09	2 YEARS	NR	PULSATILLA NIGRICANS 200	4	0	MARKED IMPROVEMENT
8.	Mrs. B. S 66 yrs/F	Housewife	31.4	15 YEARS	H/O CHIKENG UNEA BEFORE 12 YEARS	CALCAREA CARB 200	4	1	MARKED IMPROVEMENT
9.	Mr.M 58 yrs/F	Retired conductor	24	2 YEARS	NR	BRYONIA ALBA 200	4	1	MARKED IMPROVEMENT

10.	Mr.S 55 yrs/M	Fisherman	23.4	5 years	H/O CHICKEN GUNEA BEFORE 8 YEARS	BRYONIA ALBA 200	3	1	MODERATE IMPROVEMENT
11.	Mrs. P.S 58 yrs/F	Housewife	31.4	10 YEARS	H/O CHICKEN GUNEA BEFORE 12 YEARS	BRYONIA ALBA 200	4	3	MILD IMPROVEMENT
12.	Mrs.V.S 56 yrs/F	Housewife	27.4	2 YEARS	NR	BRYONIA ALBA 200	4	2	MODERATE IMPROVEMENT
13.	Mrs. T 65 yrs/F	Housewife	30.4	6 MONTHS	H/O CHIKENG UNEA Before 4 years	RHUS TOXICODENDRON 200	4	0	MARKED IMPROVEMENT
14.	Mr.M	Coolie	19.76	5 YEARS	NR	BRYONIA ALBA	3	0	MARKED

	65 yrs/M					200			IMPROVEMENT
15.	Mrs. S 45 yrs/F	housewife	30.6	1 YEARS	H/O DENGU BEFORE 4 YEARS	RHUS TOXICODENDRON 200	4	0	MARKED IMPROVEMENT
16.	Mrs. V 45 yrs/F	Coolie	27.6	3 YEARS	NR	RHUS TOXICODENDRON 200	4	0	MARKED IMPROVEMENT
17.	Mrs. S 66 yrs/F	Housewife	28.88	1 YEARS	H/O TRAUMA TO LEFT KNEE JOINT	RHUS TOXICODENDRON 200	4	1	MARKED IMPROVEMENT
18.	Mr.G.D 65 yrs/M	Police (CRPF)	23.12	6 MONTHS	NR	BRYONIA ALBA 200	4	1	MARKED IMPROVEMENT
19.	Mr.D.J 54 yrs/M	Carpenter	22.12	8 MONTHS	H/O DENGUE	BRYONIA ALBA 200	3	0	MARKED IMPROVEMENT

					BEFORE 2 YEARS				
20.	Mrs. Y.M 45 yrs/F	Housewife	28	2 YEARS	NR	RHUS TOXICODENDRON 200	3	0	MARKED IMPROVEMENT
21.	Mrs. Z 58 yrs/F	Housewife	30.1	3 YEARS	NR	RHUS TOXICODENDRON 200	3	0	MARKED IMPROVEMENT
22.	Mr.P.C 57 yrs/M	FISHERM AN	32	3 MONTHS	H/O CHIKENG UNEA BEFORE 5YEARS	BRYONIA ALBA 200	3	0	MARKED IMPROVEMENT
23.	Mr.H 67 yrs/M	Business	28.6	2 YEARS	H/O CHIKENG UNEA BEFORE 5	BRYONIA ALBA 200	4	0	MARKED IMPROVEMENT



					YEARS				
24.	Mrs. M 50 yrs/F	Housewife	28.6	5 YEARS	NR	BRYONIA ALBA 200	4	2	MODERATE IMPROVEMENT
25.	Mrs. E 66 yrs/F	Housewife	27.6	1 YEAR	H/O CHIKENG UNEA BEFORE 14 YEARS	BRYONIA ALBA 200	3	0	MARKED IMPROVEMENT
26.	Mrs. J 58 yrs/F	Housewife	29.6	1YEAR	NR	BRYONIA ALBA 200	4	2	MILD IMPROVEMENT
27.	Mrs. M 58 yrs/F	Housewife	28.4	2 YEARS	H/O CHIKENG UNEA BEFORE 3 YEARS	BRYONIA ALBA 200	3	2	MILD IMPROVEMENT
28.	Mrs. S	Housewife	29.4	9 YEARS	H/O	BRYONIA ALBA	4	1	MARKED

	48 yrs/F				CHIKENG UNEA BEFORE 10 YEARS	200			IMPROVEMENT
29.	Mrs. P 53 yrs/F	Housewife	27.6	6 MONTHS	NR	BRYONIA ALBA 200	4	2	MODERATE IMPROVEMENT
30.	Mrs. Ai 45 yrs/F	House wife	26.6	1 YEAR	H/O TRAUMA	ARNICA MONTANA 200	3	0	MARKED IMPROVEMENT

## **APPENDIX VI**

### **FORM – 4: CONSENT FORM (A)**

#### **INFORMATION FOR PARTICIPANTS OF THE STUDY**

Title of my study is “TO STUDY THE ROLE OF CENTESIMAL POTENCY IN REDUCING PAIN OF PATIENTS WITH OSTEOARTHRITIS OF KNEE JOINT ”.

The purpose of my study is (1) To know the role of the centesimal potency in reducing pain of osteoarthritis of the knee joint. (2) To know the remedies indicated in the treatment of osteoarthritis of the knee joint. Duration of my study is from July 2017 – January 2019.

The procedures include selection of 30 cases with osteoarthritis of knee joint are selected from OPD, IPD and from peripheral centers of Sarada Krishna Homoeopathic Medical College. The case will be analysed and evaluated. It is repertorised and a well selected remedy will be prescribed after referring the Materia Medica. The repetition of doses will be done based on the Homoeopathic principles. Assessment will be done once in a week or two weeks and changes will be recorded. In 3 to 6 months study.

The benefits to the subject or others, reasonably expected from research are (1) The participants are investigated to find out whether they have osteoarthritis of knee joint based on clinical symptoms and X-ray. (2) Thus study is a benefit not only to the participant but also to the society as a whole. The records are maintained highly confidential. Only the investigator has the access to the subject's medical records. Participant's identity will never be disclosed at any time, during or after the study period or during publication of the research. Securely store data documents in locked locations and Encrypt identifiable computerized data. All

information revealed by patient will be kept as strictly confidential. Free treatment for research related injury is guaranteed. Compensation of the participants not only disability or death resulting from such injury but also for unforeseeable risks is provided, in case situation arises.

Contact for trial related queries, rights of subjects and in the event of any injury.

#### INVESTIGATOR

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Sarada Krishna Homoeopathic Medical College,  
Kulasekharam, Mobile no: 9446059823.

#### GUIDE

Dr. Manoj Narayan. V  
Professor,  
Department of Organon of Medicine,  
Sarada Krishna Homoeopathic Medical College,  
Kulasekharam, Mobile no: 9995114518.

There will not be any anticipated prorated payment to the subject for participating in the trial. The responsibilities of the participants in the

trial are they must disclose all about the complaints. Participants must strictly stick on to the scheduled Diet, Regimen and Medicine.

The participation is voluntary, that the subject can withdraw from the study at any time and that refusal to participate will not involve any penalty or loss of benefits to which the subject is otherwise entitled.

**FORM – 4 A**

**CONSENT FORM (B)**

Informed Consent form to participate in a clinical trial

Study Title: TO STUDY THE ROLE OF CENTESIMAL POTENCY IN  
REDUCING PAIN OF PATIENTS WITH OSTEOARTHRITIS OF KNEE JOINT

Study Number: Subject's Initials \_\_\_\_\_ Subject's Name

\_\_\_\_\_ Date of birth/Age: \_\_\_\_\_

Please initial

Box (Subject)

- i. I confirm that I have read and understood the information sheet dated July 2017 for the above study and have had the opportunity to ask question.  
[ ]
- ii. I understood that my participation in the study is voluntary and that I am free to withdraw at any time without giving any reason. Without my medical  
[ ]  
care or legal rights being affected.
- iii. I understand that the sponsor of the clinical trial, others working on the sponsor's [ ]  
behalf the Ethics Committee and the regulatory authorities will not need my permission to look at my health records both in respect of the current study and further research that may be conducted in relation to it, even if I withdraw from the trial. I agree to this access. However, I understand that my identity will not be revealed in any information released to third parties or published.

iv. I agree not to restrict the use of any data or result that arise from this study

[ ]

provided such a use only for scientific purpose(s)

v. I agree to take part in the above study.

Signature (or Thumb impression of the subject/legally acceptable)

Representative: \_\_\_\_\_

Date \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_

Signatory's Name: \_\_\_\_\_

Signature of the Investigator: \_\_\_\_\_

Study Investigator's Name: Dr. Amrutha Manoharan

Signature of the Witness \_\_\_\_\_ Date: \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_

Signature of the Witness \_\_\_\_\_ Date: \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_